NOTE XXVII.

ASPIDOSIPHON CYLINDRICUS, N. SP.

BY

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Fig. 1. Fig. 2.

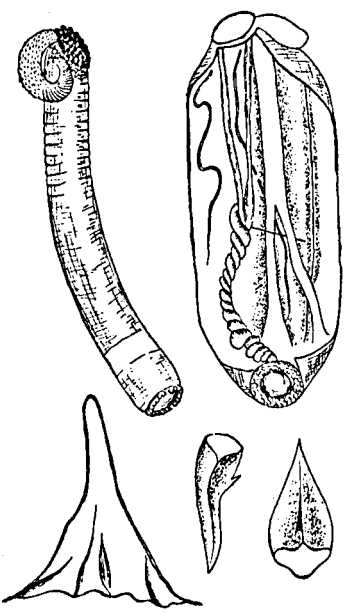

Fig. 3. Fig. 4.

Fig. 1. *A. cylindricus* from the lateral side (× 2). Fig 2. The animal laid open by an incision along the right side (× 2). Fig. 3. A hook from the basal part of the proboscis (× 215). Fig. 4. Two hooks from the terminal part of the proboscis (× 375).

Among a small collection of Invertebrates, recently collected by Mr. K. Schädler in the neighbourhood of Kisser, I met with a gephyrean worm, belonging to the genus *Aspidosiphon*. Though we know already several species of this genus from the Malay Archipelago, thanks the careful investigatons of Dr. Sluiter, during his stay at Batavia [1]), the present specimen could not be identified with one of them.

The body of our specimen (fig. 1) has a nearly cylindrical shape; it measures $3^1/_2$ mm. in breadth, its length being about eight times greater (26 mm.). The colour of the body is brownish-yellow, that of the anal and terminal shields dark brown, almost black. In the anterior half

1) Beiträge zu der Kenntniss der Gephyrëen a. d. Mal. Archipel; Natuurk. Tijdschrift voor Ned. Indië, Dl. XLI, XLIII, XLV.

of the trunk the body-wall is rather thick, marked by annular grooves; in its posterior half, however, the skin is plain and thin, and the retractor-muscles and nephridia are visible through it. On a distance of 3 mm. from the terminal shield, nearly on the place where the retractor-muscles are attached to the body-wall, the skin shows a girdle-shaped area of a glistering appearance. The cutaneous bodies (Hautkörper) are not very densely scattered over the surface of the body; they resemble those of *A. Steenstrupii* (Selenka, die Sipunculiden, taf. XIII, fig. 191), but only a single glandular opening could be detected, somewhat by the side of the centre. The anterior and posterior shields have about the same size, but not the same shape; the first of them is elliptical and lies at an oblique angle to the trunk. It is convex and divided in a great number of small polygonal areas, consisting of a dark brown chitinous substance; on the passage between this shield and the adjacent skin, similar areas are visible over a narrow space, but they are only surrounded by a dark brown margin. The posterior or terminal shield is of a paler colour, circular and concave; its margin is also divided by grooves in numerous polygonal areas.

The proboscis or introvert is very short, about 8 mm. long, though he may perhaps not be totally protruded. Its terminal part is, over a third of its length, densely beset with parallel rows of small brown hooks, the remaining posterior part showing larger hooks, irregularly scattered. The smaller hooks (fig. 4) are only 0.048 mm. high; they have the shape of a triangular pyramid, with a large convex face and two smaller concave ones. The edge between the two latter faces bears a small, hardly visible tooth in its basal half. The hooks of the basal part of the proboscis are two and a half times larger and look like conical spines, faintly bent and furnished near their base with several prominent ridges. Between both kinds of hooks the usual conical excretory ducts of glands can be observed.

The layer of longitudinal muscles is continuous, of glistering appearance, much thicker in the anterior third part of the body, where at the dorsal side some irregular slits are visible. Two strong retractor-muscles (fig. 2) are attached with broad base near the caudal end of the body, on about $^1/_7$ of its length, the left a trifle more anteriorly than the right one; they are fused nearly in the middle of the body. The spiral of the alimentary canal shows nine double coils and is furnished with a complete spindle-muscle, which is attached in the middle of the posterior shield. An other muscle (Befestiger) arises from the place of passage of the oesophagus into the intestinal spiral, passes through the angle between the two retractor muscles and is attached to the body-wall at the left of the nerve-cord. A diverticulum could not be observed. The nephridia are long and slender; they do not extend quite till the end of the retractor-muscles, and the right appears not to be so long as the left one. Over a great part of their length the nephridia are fixed to the body-wall by a mesenteric ligament.

Of the ten species of *Aspidosiphon*, observed in the Indian Ocean, our specimen most resembles in its external appearance *A. Steenstrupii* Dies. [1]); however, this species belongs to the group having the longitudinal muscles split up into bundles. In structure it more agrees with *A. ravus*, found by Sluiter in the bay of Bantam and kindly placed by him at my disposal for comparison [2]). This species, however, differs from the Kisser-specimen in several external and internal characters. Its body is only $5^1/_2$ times as long as broad, the anal shield is finely

1) Selenka, de Man und Büllow, Die Sipunculiden, Taf. I, fig. 12 und 13.

2) For some of my colleagues I think it interesting to know, that the Museum of the „Koninklijke Natuurkundige Vereeniging in Ned.-Indië" at Batavia does no longer exist, and that the Invertebrates, collected and described by Dr. Sluiter, all are transported to the Zoological Museum of the University of Amsterdam.

granular and lies with a less oblique angle to the trunk, the proboscis is longer and its hooks have another shape; internally it is distinct by its much broader nephridia and by having the retractor-muscles attached on a greater distance from the caudal extremity.

Leyden Museum, October 1898.